COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

THE APPLICATION OF THE)
CRITTENDEN-LIVINGSTON COUNTY)
WATER DISTRICT FOR APPROVAL OF) CASE NO. 2003-00311
A PROPOSED INCREASE IN RATES)
FOR WATER SERVICE)

ORDER

On August 14, 2003, Crittenden-Livingston County Water District (Crittenden-Livingston) filed its application for Commission approval of its proposed water rates. Commission Staff, having performed a limited financial review of Crittenden-Livingston's operations, has prepared the attached Staff Report containing Staff's findings and recommendations regarding the proposed rates. All parties should review the report carefully and provide any written comments or requests for a hearing or informal conference no later than 10 days from the date of this Order.

IT IS THEREFORE ORDERED that all parties shall have no more than 10 days from the date of this Order to provide written comments regarding the attached Staff Report or requests for hearing or informal conference. If no request for a hearing or informal conference is received, this case will be submitted to the Commission for a decision.

Done at Frankfort, Kentucky, this 21st day of October, 2003.

By the Commission

ATTEST:

Executive Director

STAFF REPORT

ON

CRITTENDEN-LIVINGSTON COUNTY WATER DISTRICT

CASE NO. 2003-00311

Pursuant to a request by Crittenden-Livingston County Water District (Crittenden-Livingston) for assistance with the preparation of a rate application for its water operations, Commission Staff (Staff) performed a limited financial review of Crittenden-Livingston's test year operations for the calendar year ending December 31, 2001. Staff's review was performed during the summer and fall of 2002. The scope of Staff's review was limited to obtaining information as to whether the test period operating revenues and expenses were representative of normal operations. Insignificant or immaterial discrepancies were not pursued and are not addressed herein.

Although Staff assisted Crittenden-Livingston and developed a pro forma income statement indicating the need for a revenue increase of \$398,450, or 36.1%, Crittenden-Livingston decided not to file for a rate increase in the latter months of 2002. Instead, Crittenden-Livingston on August 14, 2003 filed an application to increase its water revenues by \$213,316, an increase of 20 percent over normalized revenues from water sales of \$1,066,420. Crittenden-Livingston's application also suggested that it could have justified an increase of \$371,398, based upon its proposed revenues and expenses as shown in Exhibit 4 of its application. Because Exhibit 4 matches neither the 2001 PSC Annual Report nor the pro forma numbers developed by Staff in 2002, some explanations are required to arrive at the pro forma expense levels and revenue

requirement recommended herein. These explanations are included along with Staff's

recommended pro forma revenues and expenses as Attachment A. Staff's originally-

developed pro forma operations are included as Attachment B because they explain, in

part, the numbers used by Crittenden-Livingston in Exhibit 4 of its application.

Eddie Beavers is responsible for all revenue adjustments and the calculation of

the proposed rates, as discussed in Attachment C of this report. Jack Kaninberg is

responsible for the determination of the revenue requirement. Based on Staff's

recommended pro forma operations as shown in Attachment A, Staff believes that

Crittenden-Livingston could justify an increase in revenues of \$434,047, which is an

increase of 39.3 percent over normalized operating revenues of \$1,103,482. However,

Staff recommends that Crittenden-Livingston's requested increase of \$213,316 should

be granted, as it allows Crittenden-Livingston sufficient funds to pay its debts and to

produce a positive cash flow. Therefore, Staff is of the opinion that the rates as shown

in Attachment D are reasonable and should be approved by this Commission.

<u>Signatures</u>

Prepared by: Jack Kaninberg

Frepared by: Jack Kaninberg
Financial Analyst, Water and Sewer
Revenue Requirements Branch

Division of Financial Analysis

Decreed by Eddie Decree

Prepared by: Eddie Beavers Rate Analyst, Communications, Water,

and Sewer Rate Design Branch
Division of Financial Analysis

ATTACHMENT A
CRITTENDEN-LIVINGSTON S PRO FORMA, WITH ADJUSTMENTS BY STAFF

Account	2001	Recommended		Recommended
	Requested	Adjustments	Notes	Adjusted
	Proforma			
Water Sales	\$1,066,420	0		\$1,066,420
Forfeited Discounts	\$22,159	0		\$22,159
Misc. Service Revenues	\$14,903	0		\$14,903
Tot. Operating Revenues	\$1,103,482	0		\$1,103,482
Employee Salaries/Benefits	\$284,556	\$64,719	(1)	\$349,275
Purchased Water	\$1,406	0		\$1,406
Purchased Power	\$64,705	0		\$64,705
Chemicals	\$26,172	0		\$26,172
Maintenance/Supplies	\$53,563	(\$45,670)	(2)	\$7,893
Contractual Services	\$7,000	0	(3)	\$7,000
Rental of Equipment	0	0		0
Insurance-Vehicle	\$3,324	0		\$3,324
Insurance Gen. Liability	0	\$14,268	(4)	\$14,268
Insurance Workers Comp.	0	\$11,356	(4)	\$11,356
Insurance-Other	\$18,247	(\$18,247)	(4)	0
Bad Debt Expense	\$3,996	0		\$3,996
Misc. Exp.	\$50,870	(\$1,355)	(5)	\$49,515
Tot. Water Util. Exp.	\$513,839	\$25,071		\$538,910
Depreciation Exp.	\$318,308	(\$4,162)	(6)	\$314,146
Amortization Expense	\$4,757	0		\$4,757
Taxes Other Than Income	\$21,723	0		\$21,723
Util. Operating Expense	\$858,627	\$20,909		\$879,536
Utility Operating Income	\$244,855	(\$20,909)		\$223,946

Operating Expenses	\$858,627	\$20,909	\$879,536
Debt Service Coverage	\$616,836	\$41,740	\$658,576
Revenue Requirement	\$1,475,463	\$62,649	\$1,538,112
Less: Operating Revenues	\$1,103,482	0	\$1,103,482
Less Unrestricted Interest	\$583	0	\$583
Increase Justified	\$371,398	\$62,649	\$434,047
Increase Requested	\$213,316	Recommended Increase	\$213,316

Staff's Recommendations - Explanatory Notes

1. Employee Salaries and Benefits At the time Staff provided rate case assistance to Crittenden-Livingston, Staff normalized wage levels as of July 1, 2002 and also reclassified expenses for the Contractual Services account to produce a pro forma Salaries and Wages Expense of \$283,960. In addition, Staff's pro forma operations included Employee Benefits Expense of \$24,927 for health insurance, and \$40,388 for employee retirement contributions made by the District. The sum total of these three expense accounts is \$349,275. In contrast, Crittenden-Livingston took \$223,172 of Salaries and added \$36,384 of Pensions and Benefits Expense (both as shown in the 2001 PSC Annual Report) for a total of \$259,556. The District then added \$25,000 for estimated overtime

expense associated with additional line breaks to reach a pro forma Employee Salaries and Benefits Expense of \$284,556.

It is unclear whether or not Crittenden-Livingston's proforma includes the cost for employee health insurance, and if so, in what account. Moreover, Staff's adjustment reflects known and measurable wage changes that occurred after the 2001 test period. Therefore, Staff recommends that proforma operations include \$349,275 for Employee Salaries Expense, health insurance benefits, and retirement contributions.

2. <u>Maintenance/Supplies</u> Crittenden-Livingston's 2001 PSC Annual Report included \$7,893 for Materials and Supplies Expense, an amount which Staff did not adjust to determine pro forma operations. However, Crittenden-Livingston's application includes an adjustment of \$45,670 to Maintenance and Supplies Expense, for a pro forma expense of \$53,563. The District's explanation for the increase was that it took actual expenses up to 10/31/02 and added October expenses two more times to arrive at an annual expense.

However, the District's 2002 PSC Annual Report includes Materials and Supplies Expense of \$9,607. In marked contrast, the District's 2002 CPA Audit report lists Maintenance and Supplies Expenses of \$64,465 for 2001 and \$118,598 for 2002. Because of the wide variations between the PSC report and the CPA Audit Report in the reported levels of this account for 2001 and 2002, Staff recommends a pro forma level of Materials and Supplies Expense of \$7,893.

3. <u>Contractual Services</u> At the time Staff provided rate case assistance to Crittenden-Livingston, Staff recommended a pro forma level of Contractual Services Expense of \$32,524 including \$4,900 for accounting services and \$27,624 for other contractual services. Crittenden-Livingston's application included a pro forma expense level of \$7,000 for Contractual Services Expense, based upon a reduction of \$25,524 to reflect the purchasing of an accounting program. Staff recommends that Crittenden-Livingston's proforma expense level of \$7,000 be included for ratemaking purposes.

It should be noted that Crittenden-Livingston's application suggests that the District reclassified \$36,841 from the Contractual Services Expense account. However, it is unclear into which account this amount was reclassified in the application.

- 4. <u>Insurance Expenses</u> At the time Staff provided rate case assistance to Crittenden-Livingston, Staff reclassified various insurance expenses from some Insurance accounts into other accounts, including Insurance-Vehicle of \$3,324, Insurance-General Liability of \$14,268, Insurance-Workers Comp of \$11,356, and Employee Benefits Expense (for health insurance) of \$24,927. Crittenden-Livingston included Insurance-Vehicle of \$3,324 in its application, but it did not include the other Insurance expenses and it did not reclassify Insurance-Other of \$18,247, nor did it explain whether or why Staff's reclassifications may have been in error. Therefore, Staff recommends that the Insurance-Other expense of \$18,247 should be reclassified, and that the other insurance expenses should be included in the District's proforma operations.
- 5. <u>Miscellaneous Expense</u> At the time Staff provided rate case assistance to Crittenden-Livingston, it made an adjustment of \$1,355 to eliminate several expenses for ratemaking purposes, including Christmas party expenses of \$724 and duplicative annual dues payments to the Kentucky Rural Water Association of \$631. Crittenden-Livingston's application made no such adjustment. Staff recommends that the adjustment of \$1,355 should be included, reducing pro forma Miscellaneous Expense to \$49,515.
- 6. <u>Depreciation Expense</u> Crittenden-Livingston took Staff's pro forma Depreciation Expense of \$314,146 and increased it by \$4,162 to reflect increased depreciation expense on equipment purchased of \$41,622. Crittenden-Livingston provided no additional support for this adjustment. Therefore, Staff recommends that its pro forma Depreciation Expense of \$314,146 be included for ratemaking purposes.

Debt Service Coverage Calculation (Average of 2003 2005):

Year	Princip due 1/1	Interest due 1/1	Int. due 7/1	Total Req.
RD Loan of				
\$4,425,000				
2003A	\$21,000	\$45,000.00	\$44,527.50	\$110,527.50
2003B	\$17,000	\$40,968.75	\$40,565.00	\$98,533.75
2003C	\$7,000	\$15,750.00	\$15,592.50	\$38,342.50
				\$247,403.75
2004A	\$22,000	\$44,527.50	\$44,032.50	\$110,560.00
2004B	\$18,000	\$40,565.00	\$40,137.50	\$98,702.50
2004C	\$8,000	\$15,592.50	\$15,412.50	\$39,005.00
				\$248,267.50
2005A	\$23,000	\$44,032.50	\$43,515.00	\$110,547.50
2005B	\$18,000	\$40,137.50	\$39,710.00	\$97,847.50
2005C	\$8,000	\$15,412.50	\$15,232.50	\$38,645.00
				\$247,040.00
				\$742,711.25
Prior Debt Serv.	2003	2004	2005	
1988 Series	\$37,775.00	\$37,225.00	\$37,650.00	
1991 Series	\$21,600.00	\$21,300.00	\$21,000.00	
1994 Series	\$11,187.50	\$11,062.50	\$11, 4 25.00	
1995A Series	\$48,462.50	\$47,967.50	\$48,450.00	
1995B Series	\$5,945.69	\$5,986.75	\$6,022.69	
1996 Series	\$107,045.00	\$105,277.50	\$108,345.00	
Total	\$232,015.69	\$228,819.25	\$232,892.69	\$693,727.63
	2003-2005	Average/Yr.		
Prior Debt Serv	\$693,727.63	\$231,242.54		
New DS	\$742,711.25	\$247,570.41		
		\$478,812.95	Times 1.2 =	\$574,575.54
KIA loan of				\$84,000.00
\$1,500,000				
Total Recommend		\$658,575.54		

ATTACHMENT B STAFF S 2002 PRO FORMA OPERATIONS FOR CRITTENDEN-LIVINGSTON

Crittenden-Livingston WD	2001	Proforma	Notes	Adjusted
Staff Proforma at 9/19/02		Adjustments		
Water Sales	\$810,725	\$255,695		\$1,066,420
Forfeited Discounts	\$22,159	0		\$22,159
Misc. Service Revenues	\$14,903	0		\$14,903
Tot. Operating Revenues	\$847,787	\$255,695	(a)	\$1,103,482
Employee Salaries	\$223,172	\$23,947 \$36,841	(b)	\$283,960
Employee Benefits (Health)	0	\$24,927	(c)	\$24,927
Employee Retirement	\$36,384	\$4,004	(d)	\$40,388
Purchased Water	\$1,406	0		\$1,406
Purchased Power	\$44,932	\$18,356	(e)	\$63,288
Chemicals	\$50,468	0		\$50,468
Materials/Supplies	\$7,893	0		\$7,893
Contractual ServAcct.	\$4,900	0		\$4,900
Contractual ServOther	\$64,465	(\$36,841)	(f)	\$27,624
Rental of Equipment	\$13,829	(\$13,829)	(g)	0
Insurance-Vehicle	\$37,729	(\$34,405)	(h)	\$3,324
Insurance-Gen. Liability	0	\$14,268	(i)	\$14,268
Insurance-Workers Comp.	0	\$13,457 (\$2,101)	(j)	\$11,356
Insurance-Other	\$18,247	(\$18,247)	(k)	0
Bad Debt Expense	\$3,996	0	` '	\$3,996
Miscellaneous Expense	\$50,870	(\$1,355)	(l)	\$49,515
Tot. Water Util. Exp.	\$558,291	\$29,022		\$587,313
Depreciation Exp.	\$200,283	\$5,773 \$108,090	(m)	\$314,146
Amortization Expense	\$4,757	0		\$4,757
Taxes Other Than Income	\$17,094	\$4,629	(n)	\$21,723
Util. Operating Expense	\$780,425	\$147,514	, ,	\$927,939
Utility Operating Income	\$67,362	\$108,181		\$175,543
Interest/Div. Income	\$17,630	(\$17,047)	(o)	\$583
Interest Expense	(\$236,342)	(\$11,061)	(p)	(\$247,403)
Net Income	(\$151,350)	\$80,073		(\$71,277)

Operating Expenses	\$927,939
1.2 x Debt Serv. Covg.	\$574,576
Revenue Requirement	\$1,502,515
Less: Operating Revenues	\$1,103,482
Less Unrestricted Interest	\$583
Required increase	\$398,450
(36.1%)	

Staff s Explanatory Notes

- (a) Normalized revenues as determined by Staff's billing analysis.
- (b) Employee Salaries and Wages Expense was increased by \$23,947 based upon normalizing wage levels in effect 7/1/02, and also increased because of a reclassification of \$36,841 that had been expensed in Contractual Services-Other.
- (c) Reclassify employee health benefits from Insurance Vehicle Expense.
- (d) Calculated at 11.63% x \$347,270 in total Salaries and Wages (before capitalizations and any other adjustments)
- (e) Increased electricity costs as a result of the new water treatment plant.
- (f) Certain Contractual Services expenses of \$36,841 were actually salaries and wages, and were therefore reclassified to Salaries and Wages Expense.
- (g) The District recently eliminated this annual expense by purchasing various pieces of heavy equipment.
- (h) Reclassify \$34,405 to other accounts, including amounts to Employee Benefits and to Liability Insurance.
- (i) Reclassification of Liability Insurance from Insurance-Vehicle Expense.
- (j) Reclassification and reduction of Workers Comp Insurance for prior period payments.
- (k)Reclassification of Insurance-Other to other accounts.
- (I) Minor adjustments of Miscellaneous Expense to exclude certain items for ratemaking purposes.
- (m) Two adjustments, one for \$5,773 to normalize 2001 depreciation expense for plant additions during the year, the other to include depreciation on 2002 plant additions of approximately \$5 million.
- (n) FICA taxes of \$21,723 based upon rate of 7.65% x Salaries Expense of \$283,960.
- (o) Interest Income reduced for ratemaking purposes because only 3.3% of it is unrestricted.
- (p) Normalized Interest Expense of \$247,403.

Attachment C Rate Making Discussion

Wholesale and Bulk Rates: Staff reviewed the information and calculations for the Wholesale and Bulk Rate Customers. During Staff's field review Crittenden-Livingston stated that the wholesale customers and the District are in agreement concerning the increased wholesale rate, Staff has accepted and maintained Crittenden-Livingston proposed increase in both the wholesale rate and bulk sale rate. Staffs used the test year calculations of revenue generated by the wholesale rate and bulk sale rate and adjusted the revenue requirement that was allocated to the Retail Customer.

Cost of Service Study:

Rates: Staff's review established the total revenue required for Crittenden-Livingston is \$1,317,382, \$326,953 is obtained through sales to their Wholesale Customer, \$9,226 is obtained through sales to their Bulk Sale Customers, \$37,062 is obtained though other operating revenue and \$583 is obtained through interest income. Staff developed rates that will collect the remaining \$943,558 from the company's retail customers. The utility's expenses were analyzed and allocated according to three different classifications: Commodity, Demand, and Customer.

Commodity costs are those directly associated with the cost of water. Demand costs are those associated with providing the facilities to meet the peak demands placed on the system. Customer costs are those incurred to serve customers regardless to the varying usage.

Attachment C Case No. 2003-00311

The Allocation of Expenses sheet of the following cost of service study shows the allocation of Operation and Maintenance expenses to the functional cost components, Commission Staff utilized information obtained through the utility s application and field reviews to allocate these costs. Administrative and general expenses are allocated to the cost components based on the subtotal allocated percentages.

The Allocation of Costs sheet of the attached Cost of Service Study allocates the remaining portion of the Revenue Requirement from Rates to the retail customer in the functional cost components of Commodity, Demand and Customer. The allocation process results in \$115,162 in commodity costs, \$645,078 in demand costs and \$183,318 in customer costs.

The Calculation of Proposed Rates sheet of the attached Cost of Service Study shows the calculation of the company's retail water rates. Total commodity costs are allocated across the rate steps in accordance with usage percentages. Total demand costs are allocated across the rate steps in accordance with usage that has been adjusted to reflect the higher peak demands that are caused in the lower rate steps. Total customer costs are all collected in the first rate step, or minimum bill, since those costs do not differ with varying usage.

The total for the first rate step is \$373,932 which is divided by the number of bills issued on an annual bases which calculates to a minimum bill of \$14.06 for the first

Attachment C Case No. 2003-00311 1,000 gallons. The totals for the remaining rate steps are each divided by the actual water usage for each rate step to calculate the remainder of the rates.

The Verification of Staff's Recommended Rates sheets of the attached Cost of Service Study shows the revenue generated by these rates meets the requested revenue requirement of Crittenden-Livingston.

Attachment D of this Staff Report sets out the rates Staff is recommending for Crittenden-Livingston.

Staff Cost of Service Study

Crittenden-Livingston Water District

	Allocation of Plar	nt Value		
Critte	nden-Livingston \	Water District		
	Total	Commodity	Demand	Customer
Land & Land Rights	33,767		33,767	
Lake, River & Other Intakes	138,017		138,017	
Transmission & Distribution Mains	5,361,448		5,361,448	
Pumping Equipment	118,073		118,073	
Water Treatment Equipment	1,104,799		1,104,799	
Distribution Reservoirs & Standpipes	344,124		344,124	
Meters & Meter Installation	479,556			479,556
Services	131,282			131,282
Hydrants	428,304			428,304
Subtotal	\$8,139,370		\$7,100,228	\$1,039,142
Allocation Percentages	100%		87.2%	12.8%
Other Plant & Misc. Equipment	\$29,615		\$25,824	\$3,791
Transportation Equipment	\$46,232		\$40,314	\$5,918
Laboratory Equipment	\$4,080		\$3,558	\$522
Power Operated Equipment	\$99,705		\$86,943	\$12,762
Communication Equipment	\$3,423		\$2,985	\$438
Other Tangible Plant	47,158		41,122	6,036
Tool Shop & Garage	750		654	96
Subtotal	\$230,963		\$201,400	\$29,563
Total	\$8,370,333		\$7,301,628	\$1,068,705
Percentages	100%		87.2%	12.8%
Allocation Percentages	100%		87.2%	12.8%
Source: PSC Annual Report 2001	<u></u>	<u>'</u>	<u> </u>	

	Allocation of Depr	eciation		
Critt	enden-Livingston V	Vater District		
	Total	Commodity	Demand	Customer
Lake River & other Intakes	\$42,631	Commodity	\$42,631	Customer
Structures & Improvements	10,703		10,703	
Pumping Equipment	49,365		49,365	
Dist. Reservoirs & Standpipes	106,658		106,658	
Transmission & Distribution Mains	1,060,384		1,060,384	
Water Treatment Equipment	318,995		318,995	
Meters	115,571		3.0,000	\$115,571
Hydrants	20,911			20,911
Services	109,176			109,176
Subtotal	\$1,834,394		\$1,588,736	\$245,658
Allocation Percentages	100%		86.6%	13.4%
Office Furniture & Equipment	\$20,664		\$17,895	\$2,769
Transportation Equipment	18,603		\$16,110	\$2,493
Power Operated Equipment	48,591		\$42,080	\$6,511
Other Tangible Plant	5,831		5,050	781
Tools, Shop & Garage Equip	638		553	85
Subtotal	\$94,327		\$81,688	\$12,639
Total	\$1,928,721		\$1,670,424	\$258,297
Percentages	100%		86.6%	13.4%
Source: PSC Annual Report 2001		L	L	

1 1 1 1 1 1			
enden-Livingston	Water District	1	
	0 111		
	Commodity		Customer
			\$48,273
			\$4,238
		\$28,272	6,866
50,468	\$50,468		
4,736			\$4,736
9,880		\$7,949	\$1,931
3,996			\$3,996
19,310			\$19,310
\$456,954	\$115,162	\$252,442	\$89,350
(115,162)			
\$341,792		\$252,442	\$89,350
100%		74%	26%
\$36,915		\$27,317	\$9,598
			843
· · · · · ·			1,365
			384
			1,274
			7,182
		•	864
· · · · · ·			3,710
		•	7,853
			821
			1,237
			5,648
+		-	
\$156,840		\$116,061	\$40,779
\$613,794	\$115,162	\$368,503	\$130,129
	Total \$247,045 21,687 35,138 1,406 63,288 50,468 4,736 9,880 3,996 19,310 \$456,954 (115,162) \$341,792 100% \$341,792 100% \$34,792 \$341,793 \$341,793	Total Commodity \$247,045 21,687 35,138 1,406 \$1,406 63,288 \$63,288 50,468 \$50,468 4,736 9,880 3,996 19,310 \$456,954 \$115,162 (115,162) \$341,792 100% \$36,915 \$3,241 \$5,250 \$1,476 \$4,900 \$27,624 \$3,324 \$14,268 \$30,205 \$3,157 \$4,757 \$21,723	Total Commodity Demand \$247,045 \$198,772 21,687 \$17,449 35,138 \$28,272 1,406 \$1,406 63,288 \$63,288 50,468 \$50,468 4,736 \$9,880 9,880 \$7,949 3,996 \$19,310 \$456,954 \$115,162 \$252,442 (115,162) \$341,792 \$252,442 100% 74% \$36,915 \$27,317 \$33,241 2,398 \$5,250 3,885 \$1,476 1,092 \$4,900 3,626 \$27,624 20,442 20,442 \$3,324 2,460 \$14,268 10,558 \$30,205 22,352 \$3,157 2,336 \$4,757 3,520 \$21,723 16,075 \$156,840 \$116,061 \$116,061

	Allocation of C	Cost of Service		
	Crittenden-Livings	ston Water District		
	Total	Commodity	Demand	Customer
Operation & Maintenance	\$613,794	\$115,162	\$368,503	\$130,129
Debt Service	574,576		501,030	73,546
Depreciation	129,012		111,724	17,288
General Water Service Cost	1,317,382	115,162	981,257	220,963
Less:				
Bulk Sales	\$9,226		9,226	
Wholesales Customers	326,953		326,953	
Other Operating Revenue	37,062			37,062
Interest Income	583			583
Revenue Required from RETAIL RATES	\$943,558	\$115,162	\$645,078	\$183,318
NOTES:				
Debt Service has been allocated of	n a nercentage of Pla	nt Value from Allocat	ion of Plant Value n	ane
Depreciation has been allocated o				
Depreciation has been reduced by	<u> </u>			

	Calcul	ation of Water R	ates		
		-Livingston Wate			
	Total	First 1,000 gallons	Next 9,000 gallons	Next 10,000 gallons	Over 20,000 gallons
Actual Water Sales:					
Thousand Gallons	113,612,100	23,873,941	68,485,923	5,520,650	15,731,586
Percent	100%	21.0%	60.3%	4.9%	13.8%
Weighted Sales for Demand:					
Thousand Gallons	185,193,424	47,747,882	114,371,491	7,342,465	15,731,586
Percent	100%	25.8%	61.8%	4.0%	8.5%
Allocation of Volumetric Costs:					
Commodity	\$115,162	\$24,184	\$69,443	\$5,643	\$15,892
Demand	645,078	166,430	398,658	25,803	54,832
Customer	183,318	183,318			
Total	\$943,558	\$373,932	\$468,101	\$31,446	\$70,724
Number of Bills	26,598				
Proposed Rates		\$14.06	\$6.83	\$5.70	\$4.50

Verifica	tion of Staff's Recom	mended Ra	tes	
BILLING ANALYSIS FOR: CRITTEN	IDEN LIVINGSTON COL	JNTY WATER	DISTRICT	
TEST PERIOD 12 MONTHS ENDING	G DECEMBER 2001			
STAFF COST OF SERVICE STUDY				
METER SIZE	USAGE	BILLS	REVENUE	
5/8" X 3/4"	98,324,071	25,992	\$852,604	
1"	2,865,323	471	25,628	
2"	12,422,706	171	65,387	
WHOLESALE	148,614,855	2.20	326,953	
Bulk Loading Stations	2,239,425	4.12	9,226	
Other Operating Revenue			37062	
Interest Income			583	
TOTAL	264,466,380	26,634	\$1,317,443	

BILLING AN	IALYSIS FOR: CI	RITTENDEN L	IVINGSTON C	OUNTY WATE	RDISTRICT		
TEST PERI	OD 12 MONTHS I	ENDING DEC	EMBER 2001				
USAGE TAE	BLE STA	AFF COST OF	SERVICE STU	IDY			
METER SIZ	E: 5/8" X 3/4"						
	CLASS:			FIRST	NEXT	NEXT	OVER
	USAGE	BILLS	GALLONS	1,000	9,000	10,000	20,000
FIRST	1,000	4,404	1,703,422	1,703,422			
NEXT	9,000	20,687	78,138,115	20,687,000	57,451,115		
INEXT	9,000	20,007	70,130,113	20,007,000	37,431,113		
NEXT	10,000	690	9,089,886	690,000	6,210,000	2,189,886	
OVER	20,000	211	9,392,648	211,000	1,899,000	2,110,000	5,172,648
	TOTAL	25,992	98,324,071	23,291,422	65,560,115	4,299,886	5,172,648

REVENUE TABLE									
REVENUE BY	REVENUE BY RATE INCREMENT								
		BILLS	GALLONS	RATE	REVENUE				
FIRST	1,000	25,992	23,291,422	\$14.02	\$364,408				
NEXT	9,000		65,560,115	6.73	441,220				
NEXT	10,000		4,299,886	5.62	24,165				
OVER	20,000		5,172,648	4.41	22,811				
	TOTAL	25,992	98,324,071		\$852,604				

KT	OVER
00	20,000
25.05.4	
25,054	
10.000	309,592
•	309,592
12	125,054 140,000 265,054

REVENUE TABLE									
REVENUE BY RATE INCREMENT									
		BILLS	GALLONS	RATE	REVENUE				
FIRST	5,000	471	1,771,994	\$40.94	\$19,283				
NEXT	5,000		518,683	6.73	3,491				
NEXT	10,000		265,054	5.62	1,490				
OVER	20,000		309,592	4.41	1,365				
	TOTAL	471	2,865,323		\$25,628				

BILLING ANALYSIS FOR: CRITTENDEN LIVINGSTON COUNTY WATER DISTRICT									
TEST PERIOD 12 MONTHS ENDING DECEMBER 2001									
USAGE TABL	USAGE TABLE STAFF COST OF SERVICE STUDY								
METER SIZE:	2"								
	CLASS			FIRST	NEXT	OVER			
	USAGE	BILLS	GALLONS	15,000	5,000	20,000			
FIRST	15,000	77	295,940	295,940					
NEXT	5,000	3	57,420	45,000	12,420				
OVER	20,000	91	12,069,346	1,365,000	455,000	10,249,346			
	TOTAL	171	12,422,706	1,705,940	467,420	10,249,346			

REVENUE TABLE									
REVENUE BY	REVENUE BY RATE INCREMENT								
		BILLS	GALLONS	RATE	REVENUE				
FIRST	15,000	171	1,705,940	\$102.69	\$17,560				
NEXT	5,000		467,420	5.62	2,627				
OVER	20,000		10,249,346	4.41	45,200				
	TOTAL	171	12,422,706		65,387				

Comparison of Rates								
Crittenden-Livingston WD Retail Rates								
Gallon Usage	Current Rates	Staff Cost of Service Rates	Increase	Percentage				
1,000	\$12.15	\$14.02	\$1.87	15.4%				
2,000	17.63	20.75	3.12	17.7%				
3,000	23.11	27.48	4.37	18.9%				
4,000	28.59	34.21	5.62	19.7%				
5,000	34.07	40.94	6.87	20.2%				
6,000	38.59	46.56	7.97	20.7%				
7,000	43.11	52.18	9.07	21.0%				
8,000	47.63	57.80	10.17	21.4%				
9,000	52.15	63.42	11.27	21.6%				
10,000	56.67	69.04	12.37	21.8%				
15,000	74.37	91.09	16.72	22.5%				
20,000	92.07	113.14	21.07	22.9%				
25,000	109.77	135.19	25.42	23.2%				
30,000	127.47	157.24	29.77	23.4%				
40,000	162.87	201.34	38.47	23.6%				
50,000	198.27	245.44	47.17	23.8%				
75,000	286.77	355.69	68.92	24.0%				
100,000	375.27	465.94	90.67	24.2%				
200,000	\$729.27	\$906.94	177.67	24.4%				
300,000	\$1,083.27	\$1,347.94	264.67	24.4%				
350,000	\$1,260.27	\$1,568.44	308.17	24.5%				
	Compari	son of Rates						
Block Usage	Current Rates	Staff Cost of						
31.00		Service Rates						
First 1,000 gallons	\$12.15	\$14.02						
Next 9,000 gallons	5.48	6.73						
Next 10,000 gallons	4.52	5.62						
Over 20,000 gallons	3.54	4.41						
Effect on Retail Customer Average Bill - 5,000 Gallons Usage								
Current Rates Staff Cost of Amount % Increase								
	Ourrent Rates	Service Rates	Increase	70 morease				
	\$34.07	\$40.94	\$6.87	20.2%				
Comparison of Wholesale & Bulk Rates								
Wholesale	\$1.83 \$3.43	\$2.20 \$4.12	\$0.37 \$0.69	20% 20%				
Bulk		⊅4.1 2	Ф 0.09	20%				

ATTACHMENT D STAFF REPORT CASE NO. 2003-00311 STAFF S RECOMMENDED RATES

Monthly Water Rates

Crittenden-Livingston Water District							
<u> </u>							
Staff Cost of Service Monthly Water Rates							
5/8 x3/4 Meter							
First 1,000 gallons	\$14.02	Minimum bill					
Next 9,000 gallons	6.73	per 1,000 gallons					
Next 10,000 gallons	5.62	per 1,000 gallons					
Over 20,000 gallons	4.41	per 1,000 gallons					
1 Meter							
First 5,000 gallons	\$40.94	Minimum bill					
Next 5,000 gallons	6.73	per 1,000 gallons					
Next 10,000 gallons	5.62	per 1,000 gallons					
Over 20,000 gallons	4.41	per 1,000 gallons					
2 Meter							
First 15,000 gallons	102.69	Minimum bill					
Next 5,000 gallons	5.62	per 1,000 gallons					
Over 20,000 gallons	4.41	per 1,000 gallons					
Bulk Sales	4.12	per 1,000 gallons					
Wholesale	2.20	per 1,000 gallons					